

170381

CIBA-GEIGY

CIBA-GEIGY Corporation
Ardsley, New York 10502-2699
Telephone 914 478 3131

May 22, 1987

Mr. Richard Dulcey
U.S. Environmental Protection Agency
841 Chestnut Building
Philadelphia, PA 19107

Dear Mr. Dulcey:

Some time ago, we conversed about the air stripper at the Tyson Superfund site, constructed during the initial EPA emergency response and recently taken over by CIBA-GEIGY and SmithKline Beckman under an Administrative Consent Order. You asked me what we plan to do with exhausted carbon canisters.

Currently, over 100 such canisters from operations to date are being stored at the site, having been placed there by EPA some months ago. I have had these canisters sampled for potential landfill at Chemical Waste Management, Fort Wayne, Indiana, or Emelle, Alabama. It would be my current plan to collect the canisters generated in the future and also dispose of them at one of the above facilities.

On another matter, we discussed the current use of four carbon canisters at the site. I noted that Enviroclean suggests using five canisters since the system was originally set up for that configuration and less frequent change-outs would result. If you have no objection to this change, we would like to put it in place.

Enclosed is Enviroclean's April, 1987 report.

Please call me if you have questions or problems regarding these plans.

Sincerely,

Karline Tierney, 79

Karline Tierney, Manager
Environmental Protection

KT12:gg:26
Enc.

cc: J. Pike	- EPA
 	- EPA
J. Hagan	- SmithKline Beckman
K. Choper	- Enviroclean

AR315012



CIBA-GEIGY CORPORATION
Tyson's SITE
AIR STRIPPER OPERATIONS AND MAINTENANCE
PROGRESS REPORT
FOR
APRIL 1987

The purpose of this report is to summarize Enviroclean's activity during April, 1987. This report will discuss the following:

1. Air Stripper Maintenance Activities
2. Air Stripper Inspection Activities
3. Other Items

1. Air Stripper Maintenance Activities

The air stripper was performing without apparent problems until 21 April 1987. On that date, the leachate feed pump to the air stripper would not function in either the manual or automatic mode. Further investigation (electrical amperage and resistance measurements) indicated a locked rotor of the pump or motor. Attempts to gain entry into the leachate collection vessel were delayed until adequate health and safety equipment was brought to the site. However, to prevent leachate from collecting within the collection vessel, the existing submersible pump from the leachate collection sump was relocated to the collection vessel. The submersible pump was able to pump leachate to the stripper as long as the stripper was operating in a by-pass mode (the submersible pump lacked adequate hydraulic capacity to enable the air stripper to remain in an on-line status).

A close inspection of the pump and leachate collection vessel was performed on 22 April 1987. This inspection noted that the pump and liquid level controls were installed with little regard for future maintenance (the pump discharge riser was welded to the vessel, no unions or disconnects were provided on the pump, etc.). Based upon these problems, with consideration of the health and safety of employees as well as economics, a decision was made to leave the existing pump in place and install a new pump.

A new submersible pump (Marley, Model SKHD 150 with a 1.5 HP motor) was installed on 27 April 1987. The pump has slightly higher discharge capacity and pressure than the previous pump. Present discharge rates are approximately 41 gpm (versus 38 gpm) and discharge pressure is now 22 psi (compared to 19 psi). The replacement pump is operating from the same level controls that operated the original pump. After checkout of the new pump, the submersible pump that had been placed within the leachate collection vessel was relocated back to its original location within the leachate collection sump.

During installation of the new pump, while checking the electrical circuitry, the voltage of the incoming feed to the entire stripper system was erratic and

varied between 120 and 240 volts. Subsequent discussions with a Conrail employee indicated that Conrail was also having power supply problems and Conrail electricians were being dispatched to investigate the problem (voltage supply problems may have caused the problems with the leachate feed pump). The air stripper blower would also have been subject to these voltage irregularities. Electrical readings taken from the blower do not presently indicate damage.

2. Air Stripper Inspection Activities

Table 1 provides a summary of the more significant data recorded during the daily and weekly checking of the system. This data includes the operating status of the system, the instantaneous water flow rate, the cumulative water meter reading and the number of gallons processed each day. Additionally, OVA measurements that were taken from the influent and effluent air streams of the vapor phase carbon units are provided.

3. Other Items

During April, the waste materials that were generated during the stripper maintenance activities (i.e., packing, insulation, heat tape, pipes, valves) were disposed of. Additionally, four disposable replacement vapor phase carbon units were ordered. These units will be installed at the direction of CIBA-GEIGY. The air stripper system was checked for evidence of biological fouling. None was detected.

Due to the problems associated with the leachate feed pump, some of the maintenance activities that were scheduled to be done during April were not done. They are being rescheduled for May. These items include:

- As a temporary means for enhancing the structural stability of the stripper, strengthen the plywood plate at the bottom of the stripper;
- Disconnect the electric heat tracing.

TABLE 1
TYSONS SITE, APRIL 1967
INSPECTION CHECKLIST SUMMARY

DATE	OPERATING STATUS		INSTANTANEOUS FLOW RATE GPM	WATER METER READING, GALLONS	LEACHATE PROCESSED SINCE LAST CHECK, GALLONS	OVA METER READING, AT CARBON, PPM*	
	On-line	By-pass				INLET	OUTLET
3/31	X		35	1,278,740			
4/1	X		34	1,303,419	24,679		
4/2	X		35	1,320,550	17,131		
4/3	X		NA	1,340,650	20,100	36	0
4/4	X		35	1,362,285	21,835		
4/5	X		38	1,411,640	49,255		
4/6	X		34	1,467,700	56,160		
4/7	X		35	1,518,700	51,000		
4/8	X		35	1,561,700	43,000		
4/9	X		36	1,621,390	59,690		
4/10	X		37	1,667,400	46,010		
4/11	X		36	1,723,690	56,290	62	8.2
4/12	X		36	1,763,700	40,010		
4/13	X		35	1,827,400	63,700		
4/14	X		33	1,872,600	45,200		
4/15	X		33	1,906,200	35,600		
4/16	X		0	1,940,100	31,900		
4/17	X		35	1,969,200	29,100	85	8
4/18	X		33	2,000,700	31,500		
4/19	X		34	2,023,900	23,200		
4/20	X		34	2,052,200	28,300		
4/21**	X	X	0	2,060,900	8,700		
4/22		X	0	2,060,900	0		
4/23		X	0	2,060,900	0		
4/24		X	0	2,060,900	0		
4/25		X	0	2,060,900	0		
4/26		X	0	2,060,900	0		
4/27***	X		40	2,061,000	100		
4/28	X		40	2,103,000	42,000		
4/29	X		40	2,149,300	46,300		
4/30	X		41	2,205,300	56,000		
Volume treated this month, gallons							
				901,661	30,885		
Average daily volume treated, gallons							

*OVA readings are taken on a weekly basis.

**Daily inspection this date indicated that the feed pump was inoperative. System was placed on by-pass.

***A new feed pump was installed on 4/27/67

AR315015